

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024348**Date Inspected:** 08-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG TRIAL ASSEMBLY YARD

**WELDING:****Segment 14 West**

This QA Inspector observed ZPMC qualified welding personnel identified as 067764 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020AL-001 ; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An QinXiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR21196.ZPMC Quality Control (QC) Mr. An QinXiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

**Segment 13AE**

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## WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 054467 perform Shielded Metal Arc Welding (SMAW), weld joint identified as FB3121-001-178 ; located On Orthotropic Box Girder (OBG) X3407A to X3318B CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1. See attached photo for further details.

### Segment 13AE

This QA Inspector observed ZPMC qualified welding personnel identified as 049769 perform Shielded Metal Arc Welding (SMAW), weld joint identified as FB3108-001-071 ; located On Orthotropic Box Girder (OBG) X3407A to X3318B CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 066479 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020V-034 ; located On Orthotropic Box Girder (OBG) FB3320A to AP3018A CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qin Xiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. An QinXiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 066156 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020V-031 ; located On Orthotropic Box Girder (OBG) FB3320A to AP3018A CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qin Xiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. An QinXiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 066002 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020V-029 ; located On Orthotropic Box Girder (OBG) FB3320A to AP3019A CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qin Xiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. An QinXiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 067520 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020V-027 ; located On Orthotropic Box Girder (OBG) FB3320A to AP3019A CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qin Xiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding.

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## WELDING INSPECTION REPORT

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ZPMC Quality Control (QC) Mr. An QinXiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



### Summary of Conversations:

No significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey - 15000026784, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhune,Manoj
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art
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QA Reviewer
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